

ABSTRACT

A digital TV receiver includes an A/D converter converting an analog signal into a digital signal, a carrier recovery converting the digital pass-band signal into a digital base-band signal, and a symbol clock recovery converting digital real/imaginary base-band component signals into OQAM type of real/imaginary component signals, detecting timing error information by performing high pass-band filtering on the OQAM real/imaginary signals, and squaring and adding the filtered value, and for generating and outputting at least two times the frequency of the symbol clock corrected from the detected timing error information.